

where R<sup>1</sup> is a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms, and

R<sup>2</sup> is H, and

R<sup>3</sup> is H or a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms,

with at least one aliphatically unsaturated monomer.

2. (Amended) The antimicrobial polymer as claimed in claim 1, wherein the vinyl ether comprises 3-aminopropyl vinyl ether.

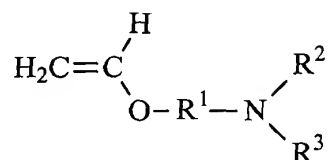
3. (Amended) The antimicrobial polymer as claimed in claim 1, wherein the aliphatically unsaturated monomer is a methacrylic acid compound.

4. (Amended) The antimicrobial polymer as claimed in claim 1, wherein the aliphatically unsaturated monomer is an acrylic acid compound.

5. (Amended) The antimicrobial polymer as claimed in claim 1, wherein the aliphatically unsaturated monomer is methyl methacrylate, ethyl methacrylate, butyl methacrylate, tert-butyl methacrylate, methyl acrylate, ethyl acrylate, butyl acrylate, tert-butyl acrylate, tert-butylaminoethyl esters, 2-diethylaminoethyl methacrylate, 2-diethylaminoethyl vinyl ether, N-3-dimethylamino-propylmethacrylamide, 3-methacryloyl-aminopropyl-trimethylammonium chloride, 2-methacryloyloxyethyltrimethylammonium chloride or 2-methacryloyloxyethyltrimethylammonium methosulfate.

6. (Amended) The antimicrobial polymer as claimed in claim 1, wherein the copolymerization is carried out on a substrate.

7. (Amended) An antimicrobial coating of a substrate, wherein at least one vinyl ether of formula



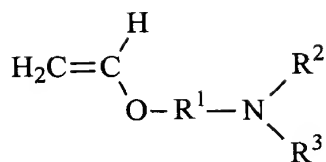
where R<sup>1</sup> is a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms, and

R<sup>2</sup> and R<sup>3</sup> are H or a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms, where R<sup>2</sup> and R<sup>3</sup> may be identical or different, are copolymerized in a graft polymerization of a substrate.

8. (Amended) The antimicrobial coating as claimed in claim 7, wherein the substrate is activated prior to the graft polymerization by UV radiation, plasma treatment, corona treatment, flame treatment, ozonization, electrical discharge or γ-radiation.

9. (Amended) The antimicrobial coating as claimed in claim 7, wherein the substrate is activated, prior to the graft polymerization, by UV radiation with a photoinitiator.

10. (Amended) A process for preparing an antimicrobial copolymer, which comprises copolymerizing a vinyl ether of formula



where R<sup>1</sup> is a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms,

R<sup>2</sup> is H, and

R<sup>3</sup> is H or a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms,

with at least one aliphatically saturated monomer.

11. (Amended) The process as claimed in claim 10, wherein the vinyl ether comprises 3-aminopropyl vinyl ether.

12. (Amended) The process as claimed in claim 10, wherein the aliphatically unsaturated monomer is a methacrylic acid compound.

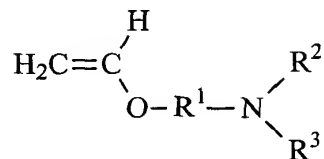
13. (Amended) The process as claimed in claim 10, wherein the aliphatically unsaturated monomer is an acrylic acid compound.

14. (Amended) The process as claimed in claim 10, wherein the aliphatically unsaturated monomer is methyl methacrylate, ethyl methacrylate, butyl methacrylate, tert-butyl methacrylate, methyl acrylate, ethyl acrylate, butyl acrylate, tert-butyl acrylate, tert-butylaminoethyl esters, 2-diethylaminoethyl methacrylate, 2-diethylamino-ethyl vinyl ether, N-3-dimethylaminopropyl-methacrylamide, 3-methacryloylaminopropyltrimethylammonium chloride, 2-

methacryloyloxyethyltrimethylammonium chloride or 2-methacryloyloxyethyltrimethylammonium methosulfate.

15. (Amended) The process as claimed in claim 10, wherein the copolymerization is carried out on a substrate.

16. (Amended) A process for preparing an antimicrobial coating of a substrate, which comprises copolymerizing at least one vinyl ether of formula



where  $\text{R}^1$  is a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms, and

$\text{R}^2$  and  $\text{R}^3$  are H or a branched or unbranched hydrocarbon radical having from 1 to 5 carbon atoms, where  $\text{R}^2$  and  $\text{R}^3$  may be identical or different, in a graft polymerization of a substrate.

Please add the following new claims:

23. (New) A process for producing a product with an antimicrobial coating, said process comprising

coating said product with the antimicrobial polymer claimed in Claim 1.

24. (New) A process for producing a medical device with an antimicrobial coating, said process comprising

coating said medical device with the antimicrobial polymer claimed in Claim 1.

25. (New) A process for producing a hygiene article with an antimicrobial coating,  
said process comprising

coating said hygiene article with the antimicrobial polymer claimed in Claim 1.

26. (New) A process of producing a surface coating, protective paint or other  
coating, said process comprising

incorporating the antimicrobial polymer claimed in Claim 1 in said surface coating,  
protective paint or other coating.

Ex 2

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